

REMARKS

This Amendment in an RCE is in response to the Final Rejection of April 4, 2007 in which claims 1-5 and 7-25 were rejected and claim 6 objected to.

With regard to the indefiniteness rejection of claims 1-9 and 25, claim 1 has been amended to remove the indefiniteness problem pointed out by the Examiner. In particular, it is now clear that only one selected bus width is used after selection based on the one or more indirect indicators. Withdrawal of the indefiniteness rejection of claims 1-9 is requested.

Regarding claim 25, it is not seen how it is related to this rejection since it depends from claim 16. Withdrawal of the indefiniteness rejection of claim 25 is requested.

Regarding the 35 U.S.C. Section 102 rejection of claims 1-5 and 7-25 as being anticipated by SDN Memory Card Specification-Part 1 Physical Layer Sepcification Version 1.01 (hereinafter SDA), the Examiner's response to our arguments have been carefully reviewed and it is still believed that the Examiner is still incorrect in his interpretation because the claims, for instance claim 1, are directed to detecting the bus width or widths available for use in the peripheral device by detecting the one or more indirect indicators formed in the peripheral device and then using the peripheral device according to the bus width or widths detected. According to the Examiner's reasoning, the selection of a communication protocol between SD mode and SPI mode constitutes detecting the bus width or widths available for use in the peripheral device. But that is not correct. As previously indicated, it is a given that both the SD mode and the SPI mode are available in an SD memory card. The act of selecting one of these modes presupposes that all cards are supporting both modes in the first place, thus the

peripheral device does not need to check any bus width either directly or indirectly when selecting an SD or SPI mode.

Furthermore, the act of selection between the two protocol modes is not indirectly indicative of two distinct bus widths since, according to the SD memory card specifications, the default mode is the 1 bit mode and there is no indication that the SD mode is anything more than a 1-bit data bus until the host sends a command (ACMD 51) to the peripheral device asking for the contents of the SD card configuration registers. The peripheral device then sends the configuration data back to the host and only then does the host get an explicit indication of the bus width.

In view of this explanation, it should be realized that it is incorrect to state that the selection between the two protocol modes is indirectly indicative of two distinct bus widths.

The "indirect indication" of a bus width as claimed in the instant application has to do with avoiding the command/response scenario described above, as well as the need to store the configuration information about the available bus width in any configuration register in the peripheral device.

Thus, it will be realized that after selecting the SD mode and beginning the initialization with 1-bit data line, it is then possible for the host to find out whether the peripheral device supports only 1-bit on the data bus or the full 4 bits. This can be done explicitly, according to the prior art reference, by consulting the SD card configuration register in the peripheral device or indirectly, according to the present invention. See the present application at page 2, line 20 through page 3, line 11. There, it is explained that the SD memory card specification comprises a data bus in which it is possible to select either a 1-bit or a 4-bit data bus. This is talking about the fact that some older SD memory cards can operate only with a 1-bit data bus, as is the case in the SPI mode as well. However, newer SD memory cards can operate in the SD mode with either the older 1-bit data bus or a 4-data bus. Thus, the 1-bit

data bus /4-bit data bus distinction raised by the Examiner does not pertain to the use of either the SD mode or the SPI mode but rather two different ways to use the SD mode. Therefore, it is believed that the Examiner has misunderstood the technical content of the reference.

The selection of the SD protocol mode or the SPI protocol mode directly triggers the default mode which is a 1-bit data bus in both modes. In SPI mode, it always stays that way. In SD mode, on the other hand, it is possible to find out if the peripheral device supports a wider bus by sending a command to the peripheral device to send back the contents of its SD card Configuration Register. This is a direct indication of the bus width available in the card in SD mode.

The selection of either one of the SD protocol mode or SPI protocol mode automatically defaults to the 1-bit bus width and the selection of a wider bus width only takes place after the Configuration Register is consulted and its contents directly indicated back to the host and is directly (not indirectly) indicating the bus width. It is not believed that the Examiner's interpretation is correct because the indication is not indirect but rather direct, i.e., a command and a response.

The present invention takes the approach of avoiding such a direct indication and makes it possible for instance to set up the correct bus faster or to avoid the storage of the configuration information in the first place. The indirect indication, according to the present invention, can take many forms, not just the version (indicated as allowable by the Examiner). In a first embodiment of the invention the bus width of the card is deduced from the speed register. In another embodiment, the card version may be utilized. Or, in yet another alternative, information about the card type can be used as an indirect indication. In yet another embodiment, various indirect indications are combined to deduce the bus width indirectly. These are of course not exhaustive of the many possibilities for indirect indications.

Therefore, in view of the above remarks, it is requested that the Examiner reconsider the novelty rejection of claim 1-5 and 7-25 based on SDMCS and withdraw same because it is not anticipatory.

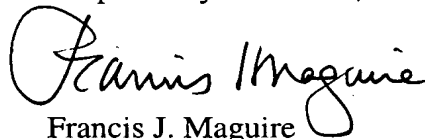
Regarding the novelty rejection of claims 1, 10, 11, 16, 21, 22, 22 and 24 based on *Okamoto et al* (US 2001/0021956 A1), the Examiner is referred to applicant's previous remarks about the *Okamoto et al* reference as filed with the Amendment filed December 27, 2006. Again, like the SDMCS specification, we have here a direct indication of a bus width (for example paragraphs 29 and 27). See the detailed comments made previously. Withdrawal of the novelty rejection of claims 1, 10, 11, 16, 21, 22 and 24 is again requested.

Regarding the novelty rejection of claims 1, 10, 11, 16, 21, 22 and 24 based on *Hirabayashi et al* (US 6,481,629), the Examiner is referred to the remarks filed December 27, 2006 for the same rejection. For the same reasons, withdrawal thereof is requested.

The applicant again notes the indication of allowable subject matter in claim 6 with appreciation but it is believed that the Examiner will be persuaded by the above remarks that all of the claims, as amended, are patentable, not just claim 6.

The objections and rejections of the Final Office Action of April 4, 2007, having been obviated by amendment or shown to be inapplicable, withdrawal thereof is requested and passage of claims 1-25 to issue is earnestly solicited.

Respectfully submitted,



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